

IN THE CLAIMS

Following is a complete set of claims. No changes have been made to the claims.

- 1 1. (original) An apparatus for re-routing user connections between first and second
2 nodes in a network switch, the apparatus comprising:
3 a loop-back path to provide connectivity between the first and second nodes, the first
4 node having a primary connection and a secondary connection, the primary connection carrying
5 the user connections during a normal mode; and
6 a switching element coupled to the loop-back path and the first node to switch the
7 connectivity from the primary connection to the secondary connection when there is a failure
8 condition at the primary connection.
- 1 2. (original) The apparatus of claim 1 wherein the loop-back path is one of a
2 physical connection and a logical connection.
- 1 3. (original) The apparatus of claim 2 wherein the failure condition is detected by a
2 network monitor.
- 1 4. (original) The apparatus of claim 3 further comprising:
2 a re-route handler coupled to switching element to control the switching element based
3 on a connectivity status between the first and second nodes, the connectivity status indicating the
4 failure condition at the primary connection between the first and second nodes.
- 1 5. (original) The apparatus of claim 4 wherein the switching element switches the
2 connectivity based on the connectivity status provided by the connectivity monitor.
- 1 6. (original) The apparatus of claim 5 wherein the secondary connection does not
2 carry user connections during the normal mode.
- 1 7. (original) The apparatus of claim 6 wherein the network switch is an
2 asynchronous transfer mode (ATM) switch.

1 8. (original) The apparatus of claim 7 wherein the primary and secondary
2 connections correspond to a virtual path connection (VPC) in the ATM switch.

1 9. (original) The apparatus of claim 8 wherein the network monitor is one of an
2 operations, administration, and maintenance (OAM) monitor and a call release procedure.

1 10. (original) The apparatus of claim 9 wherein the primary and secondary
2 connections have equal connection capacity.

1 11. (original) A method for re-routing connections between first and second nodes in
2 a network switch, the method comprising:
3 connecting the first and second nodes by a loop-back path, the first node having a
4 primary connection and a secondary connection, the primary connection carrying user
5 connections during a normal mode; and
6 switching the connectivity from the primary connection to the secondary connection by a
7 switching element when there is a failure condition at the primary connection.

1 12. (original) The method of claim 11 wherein the loop-back path is one of a
2 physical connection and a logical connection.

1 13. (original) The method of claim 12 wherein the failure condition is detected by a
2 network monitor.

1 14. (original) The method of claim 13 further comprising:
2 controlling the switching element by a re-route handler based on a connectivity status
3 between the first and second nodes provided by the network monitor, the connectivity status
4 indicating the failure condition at the primary connection between the first and second nodes.

1 15. (original) The method of claim 14 wherein the switching element switches the
2 connectivity based on the connectivity status provided by the network monitor

1 16. (original) The method of claim 15 wherein the secondary connection does not
2 carry user connections during the normal mode.

1 17. (original) The method of claim 16 wherein the network switch is an
2 asynchronous transfer mode (ATM) switch.

1 18. (original) The method of claim 17 wherein the primary and secondary
2 connections correspond to a virtual path connection (VPC) in the ATM switch.

1 19. (original) The method of claim 18 wherein the network monitor is one of an
2 operations, administration, and maintenance (OAM) monitor and a call release procedure.

1 20. (original) The method of claim 19 wherein the primary and secondary
2 connections have equal connection capacity.

1 21. (original) A computer program product comprising:
2 a computer usable medium having computer program code embodied therein for re-
3 routing connections between first and second nodes in a network switch, the computer program
4 product having:

5 computer readable program code for connecting the first and second nodes by a
6 loop-back path, the first node having a primary connection and a secondary connection,
7 the primary connection carrying user connections during a normal mode; and

8 computer readable program code for switching the connectivity from the primary
9 connection to the secondary connection by a switching element when there is a failure
10 condition at the primary connection.

1 22. (original) The computer program product of claim 21 wherein the loop-back path
2 is one of a physical connection and a logical connection.

1 23. (original) The computer program product of claim 22 wherein the failure
2 condition is detected by a network monitor.

1 24. (original) The computer program product of claim 23 further comprising:
2 computer readable program code for controlling the switching element by a re-route
3 handler based on a connectivity status between the first and second nodes provided by the
4 network monitor, the connectivity status indicating the failure condition at the primary
5 connection between the first and second nodes.

1 25. (original) The computer program product of claim 24 wherein the switching
2 element switches the connectivity based on the connectivity status provided by the network
3 monitor.

1 26. (original) The computer program product of claim 25 wherein the secondary
2 connection does not carry user connections during the normal mode.

1 27. (original) The computer program product of claim 26 wherein the network switch
2 is an asynchronous transfer mode (ATM) switch.

1 28. (original) The computer program product of claim 27 wherein the primary and
2 secondary connections correspond to a virtual path connection (VPC) in the ATM switch.

1 29. (original) The computer program product of claim 28 wherein the network
2 monitor is one of an operations, administration, and maintenance (OAM) monitor and a call
3 release procedure.

1 30. (original) The computer program product of claim 29 wherein the primary and
2 secondary connections have equal connection capacity.

1 31. (original) A system comprising:
2 first and second nodes to carry user connections in a network switch; and
3 a circuit coupled to the first and second nodes to re-route the user connections between
4 first and second nodes, the circuit comprising:

5 a loop-back path to provide connectivity between the first and second nodes, the
6 first node having a primary connection and a secondary connection, the primary
7 connection carrying the user connections during a normal mode; and

8 a switching element coupled to the loop-back path and the first node to switch the
9 connectivity from the primary connection to the secondary connection when there is a
10 failure condition at the primary connection.

1 32. (original) The system of claim 31 wherein the loop-back path is one of a physical
2 connection and a logical connection.

1 33. (original) The system of claim 32 wherein the failure condition is detected by a
2 network monitor.

1 34. (original) The system of claim 33 wherein the circuit further comprises:
2 a re-route handler coupled to the switching element to control the switching element
3 based on a connectivity status between the first and second nodes, the connectivity status
4 indicating the failure condition at the primary connection between the first and second nodes.

1 35. (original) The system of claim 34 wherein the switching element switches the
2 connectivity based on the connectivity status provided by the network monitor.

1 36. (original) The system of claim 35 wherein the secondary connection does not
2 carry user connections during the normal mode.

1 37. (original) The system of claim 36 wherein the network switch is an asynchronous
2 transfer mode (ATM) switch.

1 38. (original) The system of claim 37 wherein the primary and secondary
2 connections correspond to a virtual path connection (VPC) in the ATM switch.

1 39. (original) The system of claim 38 wherein the network monitor is one of an
2 operations, administration, and maintenance (OAM) monitor and a call release procedure.

40. (original) The system of claim 39 wherein the primary and secondary connections have equal connection capacity.